Applicant: Shih-Chieh Hung et al. Attorney's Docket No.: 12862-002001 / 0674-5737US

Serial No.: 09/761,893 Filed: January 17, 2001

Page : 2 of 6

## Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

## Listing of Claims:

- 1. (Currently Amended) A method for recovering mesenchymal stem cells, comprising:
  - (a) providing a mixture comprising mesenchymal stem cells;
- (b) seeding the mixture [[into]] <u>in</u> a culture device and isolating the mesenchymal stem cells prior to cell adherence to the culture device that contains a plate having pores, wherein the pore size is sufficient for separating mesenchymal stem cells from other cells; and
  - (c) recovering the mesenchymal stem cells from the plate.
  - 2. (Cancelled)
- 3. (Currently amended) The method as claimed in claim [[2]] 1, wherein the pore size ranges from about 0.4 to 40 microns in diameter.
- 4. (Previously presented) The method as claimed in claim 1, wherein the mixture comprises mammalian mesenchymal stem cells.
- 5. (Previously presented) The method as claimed in claim 4, wherein the cells are selected from the group consisting of fractioned tissue, un-fractioned tissue, and a body fluid.
- 6. (Previously presented) The method as claimed in claim 5, wherein the mixture comprises human mesenchymal stem cells.

Applicant: Shih-Chieh Hung et al. Attorney's Docket No.: 12862-002001 / 0674-5737US

Serial No.: 09/761,893 Filed: January 17, 2001

Page : 3 of 6

7. (Previously presented) The method as claimed in claim 5, wherein the cells are selected from the group consisting of a bone marrow, an embryonic yolk sac, a placenta, an umbilical cord, a fetal, adolescent or adult body fluid, and a fetal, adolescent or adult tissue.

## 8. (Cancelled)

- 9. (Previously presented) The method as claimed in claim 1, wherein the mesenchymal stem cells are differentiatable into tissues comprising bone, adipose, or cartilage.
- 10. (Previously presented) The method as claimed in claim 1, wherein the mesenchymal stem cells are characterized by CD 34<sup>-</sup>.
- 11. (Previously presented) The method as claimed in claim 9, wherein the mesenchymal stem cells are cultured in 10% fatal bovine serum-supplemented Dulbecco's modified Eagle's medium containing 1 g/L of glucose.
- 12. (Withdrawn) An isolated mesenchymal stem cell recovered by the method as claimed in claim 1, which has the capability of self-renewal and pluripotent differentiation.
- 13. (Withdrawn) The mesenchymal stem cell as claimed in claim 12, which can differentiate into tissues comprising bone, adipose, or cartilage.
- 14. (Withdrawn) The mesenchymal stem cell as claimed in claim 12, which is characterized by CD34<sup>-</sup>.
- 15. (Withdrawn) A composition comprising the mesenchymal stem cell as claimed in claim 12 and a culture medium, wherein the medium expands the mesenchymal stem cell.

Applicant: Shih-Chieh Hung et al. Attorney's Docket No.: 12862-002001 / 0674-5737US

Serial No.: 09/761,893 Filed: January 17, 2001

Page : 4 of 6

16. (Withdrawn) The composition as claimed in claim 15, wherein the mesenchymal

stem cell is characterized by CD34-.

17. (Withdrawn) The composition as claimed in claim 15, wherein the medium

comprises DMEM-LG medium containing 10% fetal bovine serum.

18. (Withdrawn) A pharmaceutical composition comprising the mesenchymal stem

cell as claimed in claim 12 and a pharmaceutically acceptable carrier, wherein the mesenchymal

stem cell is present in an amount sufficient to serve as tissue replacement or gene therapy for

tissues damaged by age, trauma, and disease.

19. (Withdrawn) The pharmaceutical composition as claimed in claim 18, wherein the

mesenchymal stem cell can differentiate into tissues comprising bone, adipose, or cartilage.

20. (Withdrawn) The composition as claimed in claim 18, wherein the mesenchymal

stem cell is characterized by CD34<sup>-</sup>.

21-22. (Cancelled)

23. (Currently amended) The method as claimed in claim [[22]] 5, wherein the body

fluid is blood a bone marrow aspirate.

24-31. (Cancelled)